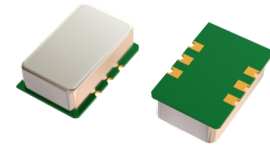


14.2 x 9.3 mm SMD LVPECL/LVDS Voltage Controlled Crystal Oscillator

Feature

- Typical 14.2 x 9.3 x 5.4 mm 6 pads ceramic SMD package
- Tight symmetry (45 to 55%) available
- Wide frequency control range
- Complementary Output
- Low phase jitter (Max:0.5 pSec)



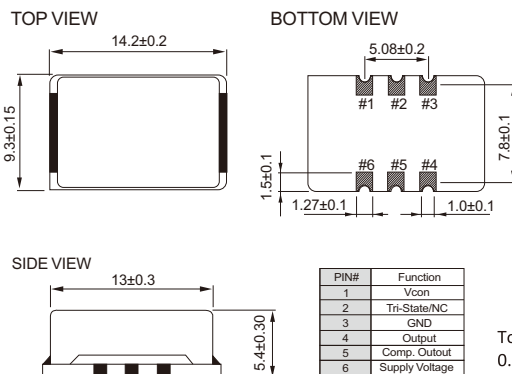
Electrical Specifications

Parameter		LVPECL				LVDS				Unit	
		3.3V		2.5V		3.3V		2.5V			
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation(VDD)		VDD-5%	VDD+5 %	VDD-5%	VDD+5 %	VDD-5%	VDD+5 %	VDD-5%	VDD+5 %	V	
Frequency Range		30	250	30	250	30	250	30	250	MHz	
Standard Frequency		77.76,106.25,122.88,125,155.52,156.25,200									MHz
Absolute Pulling Range (APR)		±50	-	±50	-	±50	-	±50	-	ppm	
Control Voltage Range		0.3	3.0	0	2.5	0.3	3.0	0	2.5	V	
Supply Current	1.5 MHz ≧ F0 < 65 MHz	-	75	-	75	-	45	-	45	mA	
	65 MHz ≧ F0 < 250 MHz	-	100	-	100	-	80	-	80		
Output Level	Output High	2.275	-	1.475	-	-	1.6	-	1.6	V	
	Output Low	-	1.68	-	1.095	0.9	-	0.9	-		
Transition Time: Rise/Fall Time +		-	1.0	-	1.0	-	1.0	-	1.0	nSec	
Start Time		3				3				mSec	
Tri-State (input to Pin 2)	Enable (High voltage or floating)	-	0.99	-	0.75	-	0.99	-	0.75	V	
	Disable (Low voltage or GND)	2.31	-	1.75	-	2.31	-	1.75	-		
Linearity		-	10	-	10	-	10	-	10	%	
Modulation Bandwidth (BW)		15	-	15	-	15	-	15	-	kHz	
Input Impedance		10	-	10	-	10	-	10	-	M Ω	
RMS Phase Jitter (Integrated 12kHz~20MHz)	F0 < 100 MHz	-	1.0	-	1.0	-	1.0	-	1.0	pSec	
	100 MHz ≧ F0 < 125 MHz	-	0.7	-	0.7	-	0.7	-	0.7		
	125 MHz ≧ F0 < 150 MHz	-	0.5	-	0.5	-	0.5	-	0.5		
	150 MHz ≧ F0	-	0.3	-	0.3	-	0.3	-	0.3		
Phase Noise @155.52MHz	100 Hz	-85		-85		-85		-85		dBc/H z	
	1KHz	-115		-115		-115		-115			
	10KHz	-130		-130		-130		-130			
Aging (@ 25°C 1st year)		-	±3	-	±3	-	±3	-	±3	Ppm	
Storage Temp. Range		-55	125	-55	125	-55	125	-55	125	℃	

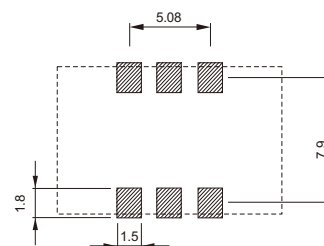
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position

+ Transition times are measured between 20% and 80% of VDD.

Dimension(mm)



Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1 μF as close to the part as possible between VDD and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

ppm / Temp. (°C)	±25	±50
-10 ~ +60	△	O
-20 ~ +70	△	O
-40 ~ +85	X	O

o: Available △ :Conditional X: Not available

Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1 st year), shock, and vibration